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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/554,269	06/29/2000	MANFRED BRAUNER	TPP-30873	2242

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EXAMINER	
EGAN, BRIAN P	

ART UNIT	PAPER NUMBER
1772	

DATE MAILED: 10/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/554,269	BRAUNER, MANFRED	
	Examiner	Art Unit	
	Brian P. Egan	1772	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 August 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-9,12-15,17-22,24 and 25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4, 6-9, 12-15, 17-22, and 24-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Interpretation

1. Claim 1 contains the newly added limitation "whereby a pivot line is formed, which pivot line facilitates resilient action in the wall section." The examiner notes that a "whereby" clause that merely states the result of the limitations in the claim adds nothing to the patentability or substance of the claim. Therefore, the phrase fails to limit the claim. The examiner suggests replacing "whereby" with "wherein" to lend proper weight to the pivot line limitation.

Claim Objections

2. Claim 1 is objected to for minor informalities. The newly amended limitation "and A material thickness..." uses a capital "A." The examiner suggests replacing this with a lower case "a" to facilitate clarity. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-4, 6-9, 12-15, 17-22, and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brauner (WO 97/39954) in view of Buckethal (#3,816,181), and Umiker (#5,395,010).

Brauner teaches a flat or semi-flat element to be used in a collapsible container (See Abstract and Figs. 1-5) including a partly or completely circumambient frame (Page 2, lines 2-5) and an intermediate wall section (Fig. 1, #1), which element is manufactured through molding of a polymeric material (Page 1, lines 27-28), whereby the frame is used as a carrying structure (Page 2, lines 19-21). The frame contains a closed hollow profile (Page 2, lines 2-5) and the frame is connected to the wall at its corner (Figs. 3-4, #7 (Frame) connected to #1 (Wall Section)), thereby being attached at a symmetrical point whereby a gravity center line runs through the connection point and the opposite corner. Although the frame is connected to the wall at its corner, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have rearranged the connection point such that it is connected along a straight wall portion of the frame since, absent unexpected results, it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. The closed hollow profile of the frame is formed by injection molding (Page 1, lines 27-28). The thermoplastic material is allowed to solidify closest to the inner wall of the mold so that a barrier is formed before injecting a pressurized fluid to create the hollow profile (Page 2, lines 2-14).

Brauner fails to teach the use of a resilient section to combat temperature related shrinkage of the injection molded parts. Brauner also fails to teach U-shaped and ribbed frame embodiments, and also fails to teach the wall section being thinner at the side closest to the frame section than the average thickness of the wall section.

Buckethal, however, teaches the use of a resilient section of reduced thickness at the juncture between two sections in an injection molded container (see Abstract). Buckethal teach

the use of a reduced thickness resilient section between junctures in an injection molded container for the purpose of providing a section that is flexible, thereby allowing the walls to remain straight and relieving stresses caused by differential shrinkage characteristics while also improving the impact strength and physical characteristics of the container (Col. 2, lines 6-14; Col. 2, line 60 to Col. 3, line 40; Col. 5, lines 60-64; Col. 7, lines 63-67). It would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have combined the teachings of Brauner and Beckethal since each of the aforementioned references are analogous insofar as being directed towards injection molded containers – Beckethal providing a comparative advantage insofar as solving for differential shrinkage problems.

Therefore, it would have been obvious to one of ordinary skill in the art to modify Brauner by inserting a resilient section of reduced thickness between the wall and the frame (thus implicitly providing a pivot line and a wall and frame with disparate thicknesses) as taught by Beckethal in order to provide a section that is flexible, thereby allowing the walls to remain straight and relieving stresses caused by differential shrinkage characteristics while also improving the impact strength and physical characteristics of the container.

With regards to the frame structure, Umiker teaches that it is notoriously well known to provide frame structures of plastic containers with multiple embodiments, including the conventional embodiments which include U-shaped and ribbed profiles (see Fig. 2), as well as embodiments slightly more structurally sound which include closed hollow profiles (see Fig. 3). Although Umiker fails to teach a rib structure wherein the ribs are spaced at a distance from each other smaller than the height of each of the plurality of ribs, it would have been an obvious matter of design choice to change the size of each rib and distance between each rib, since such

a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). Umiker teaches the notoriously well known embodiments for the purpose of demonstrating the multiple forms of handle portions that are available for plastic container structures.

Therefore, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have modified Brauner by interchanging the frame structure with U-shaped, ribbed, and hollow profiles as taught by Umiker in order to create a desirable handle portion for the end product.

Response to Arguments

5. Applicant's arguments with respect to claims 1-4, 6-9, 12-15, 17-22, and 24-25 have been considered but are moot in view of the new ground(s) of rejection.

Pursuant to the interview held between the examiner and the applicant's representatives as well as the amended claims, the examiner has withdrawn all 35 U.S.C. 112 and 35 U.S.C. 103 rejections from the previous office action.

Related Prior Art

6. Although not relied upon in the above rejection, the examiner directs the applicant's attention to several other pertinent prior art references related to the field of the applicant's invention. These include:

US #4,430,370 (Gallagher) – teaching the use of a resilient section in an injection molded structure to alleviate differential shrinkage problems;

US #5,476,705 (Mizuse et al.) ;

US #4,201,295 (Morcom) ; and

US #3,907,193 (Heller).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Egan whose telephone number is 571-272-1491. The examiner can normally be reached on M-F, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BPE 10/27/04

HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

10/27/04